INTELLIGENT PCI BRIDGING

ABSTRACT

A bridging device has at least two ports. The first port allows the device to communicate with devices on an expansion bus and at least one other port to allow the bridge to communicate with a system memory on a system bus or other devices on another expansion bus. The device is capable of identifying at least two regions in memory, a descriptor region and a data region. A descriptor provides information about segments of data in the data region. The bridge may detect descriptors read from the memory, extract information related to data associated with those descriptors and use this information to perform prefetching of data from the system memory.